IN THE CLAIMS:

Claims 1-17 and 31-37 (Cancelled)

18. (Currently Amended) A computer-readable medium having stored thereon a computer program that, when executed by one or more computers, causes the one or more computers to:

acquire imaging data of a phantom from an external device, wherein the imaging data includes a plurality of pixels;

isolate a first set and a second set of pixels;

set one of the first set and the second set to an initial value;

thereafter, filter the imaging data;

determine an ~~helical~~ artifact index ~~(HAI)~~ (AI); and

visually display ~~the HAI~~ the AI on a console.

19. (Original) The computer readable medium of claim 18 wherein the external device is one of a CT scanner, an MRI scanner an x-ray scanner, a PET imaging system, and an ultrasound imaging system.

20. (Original) The computer readable medium of claim 18 wherein the phantom has a shape to simulate an anatomical region of a patient.

21. (Original) The computer readable medium of claim 20 wherein the region includes bone simulation.

22. (Original) The computer readable medium of claim 21 wherein the bone simulation simulates a rib.

23. (Original) The computer readable medium of claim 20 wherein the region includes tissue simulation.

24. (Original) The computer readable medium of claim 18 wherein the computer program further causes the one or more computers to set the one of the first set and the second set of pixels to zero.

25. (Original) The computer readable medium of claim 24 wherein the computer program further causes the one or more computers to determine a mean of the one of the first set and the second set of pixels.

26. (Original) The computer readable medium of claim 25 wherein the computer program further causes the one or more computers to subtract the mean from the imaging data.

27. (Original) The computer readable medium of claim 18 wherein the computer program further causes the one or more computers to:

square each pixel of the one of the first set and the second set of pixels;

sum the squares;

divide the sum by a number of pixels of the one of the first set and the second set of pixels; and

modify the quotient by a scalar.

28. (Original) The computer readable medium of claim 18 wherein one of the first set and the second set of pixels includes imaging values within ± 40 CT numbers of a range of an expected uniform material value.

29. (Original) The computer readable medium of claim 18 wherein one of the first set and the second set of pixels includes pixels having no visual artifact.

30. (Currently Amended) The computer readable medium of claim 18 wherein the computer program further causes the one or more computers to display the ~~HAI on~~ AI on the console as at least one of a histogram and a bar graph.

38. (Currently Amended) A method of generating ~~a helical~~ an artifact score, the method comprising:

acquiring imaging data of a subject, the imaging data including a plurality of pixels;

partitioning the plurality of pixels into a first set and a second set;

initializing the first set to a base value;

comparing the first set to the second set;

determining an ~~helical~~ artifact index ~~(HAI)~~ (AI) from the comparison; and

visually conveying the HAI.

39. (Previously Presented) The method of claim 38 wherein the step of partitioning includes the step of generating a mask from the plurality of pixels.

40. (Previously Presented) The method of claim 39 wherein the step of generating a mask further comprises the step of identifying a set of pixels within a range of an expected uniform material value.

41. (Previously Presented) The method of claim 40 wherein the range is ± 40 CT numbers.

42. (Previously Presented) The method of claim 40 further comprising isolating a region of the plurality of pixels absent visual artifacts.

43. (Previously Presented) The method of claim 40 further comprising the step of determining a numeric mean of the set of pixels within the range.

44. (Previously Presented) The method of claim 43 further comprising the step of subtracting the mean from each pixel of the plurality of pixels.

45. (Previously Presented) The method of claim 40 further comprising steps of:

squaring each pixel of the plurality of pixels;

summing the squared pixels; and

dividing the summation by a mask pixel count.

46. (Previously Presented) The method of claim 45 further comprising the step of modifying the quotient by a scalar.

47. (Previously Presented) The method of claim 46 further comprising the step of determining the scalar by statistically correlating trained observers responses to a reconstructed image of the imaging data.

48. (Previously Presented) The method of claim 46 wherein the step of determining a helical artifact index includes the step of determining a likelihood of artifact presence in the reconstructed image by comparing the modified quotient to an artifact scale.

49. (Previously Presented) The method of claim 48 wherein the artifact scale has a maximum of ten and a minimum of one.

50. (Previously Presented) The method of claim 38 further comprising the step of filtering the imaging data with a two-dimensional array.

51. (Previously Presented) The method of claim 50 wherein the filtering two dimensional array includes a Hanning kernel.

52. (Previously Presented) The method of claim 50 wherein the filtering two dimensional array has a five by five orientation.

53. (Previously Presented) The method of claim 38 wherein the base value is a whole number.

54. (Previously Presented) The method of claim 53 wherein the base value is zero.

55. (Previously Presented) The method of claim 38 wherein the subject includes a phantom designed to simulate an anatomical region of a patient.

56. (Previously Presented) The method of claim 38 wherein the step of acquiring the imaging data includes the step of acquiring CT imaging data of the phantom using a CT scanner.